EXECUTIVE SUMMARY

Prepared November 22, 1994

Mine Name: Topaz Valley Limestone Quarry **I.D. No:** M/023/022
Operator: Meadow Valley Contractors, Inc. & Rancho Equipment Services.

279 East Main
P. O. Box 591
Delta, Utah 84624

Telephone: (801) 864-3971
Contact Person: Ronald R. Day, Vice Pres

County: Juab
New/Existing: New
Mineral Ownership: BLM
Surface Ownership: BLM
Lease No.(s): UTU-063449
Permit Term: Life of Mine

Life of Mine: 8 years

Legal Description: SE 1/2 - SW 1/4 and the SW 1/4 - SE 1/4 of Section 21, Township 13 South, Range 11 West, Salt Lake Base Meridian, Juab County, Utah

Mineral(s) to be Mined: Limestone

Mining Methods: Drilling and blasting; then fed into crusher to obtain desired material

Acres to be Disturbed: 15.8

Present Land Use: Livestock grazing, dispersed recreation, hunting and as wildlife habitat.

Postmining Land Use: Livestock grazing, hunting and wildlife habitat.

Variances from Reclamation Standards (Rule R647) Granted: None

Soils and Geology:

Soil Description: Soils reflect the parent rock type and are in the process of being formally mapped. They are generally light gray to pale brown, alkaline, gravelly loams and sandy loams. Alluvial fans & valley floors contain soils that are very deep & well drained. The surface layer is loam or sandy loam which is gravelly or very gravelly in most places. The subsoil is gravelly & very gravelly with loam and sandy loam textures.

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Special Handling Problems: None

Geology Description: Limestone Quarry is situated on a small hill @ 3 miles south-southeast from the summit of Topaz Mountain, in the Thomas Range.

Hydrology:

Ground Water Description: Natural springs do not exist (the closest is found over 5 miles south of the quarry site. The actual depth of the local water table at the site is unknown, but is well below the final depth of the quarry floor.

Surface Water Description: There are no perennial or intermittent surface waters near the quarry. Local drainages are ephemeral and small surface ponds exist only during periods of heavy precipitation.

Water Monitoring Plan: None required at present time.

Ecology:

Vegetation Type(s); Dominant Species: Vegetation is salt desert shrub. Composition is @ 60% grasses (Indian ricegrass, Oryzopsis hymenoides, curly grass (Hilaria jamesii) and three awn (Aristida longiseta), 39% desert shrubs - black sagebrush (Artemisia nova), shadscale (Atriplex confertifolia) Mormon tea (Ephedra nevadensis), Winterfat (Eurotia lanata) and budsage (Artemisia spinescens). Remaining vegetation consists of forbs (Penstemon spp.) and cacti (prickly pear (oppuntchia spp).

Percent Surrounding Vegetative Cover: @ 70%

Wildlife Concerns: No threatened, endangered, or sensitive animal species are known to reside near the quarry. No known raptor nests are currently located within or near the mine area. Common species of wildlife occurring in the area include: pronghorn antelope, mule deer, coyote, kit fox, badger, black-tailed jackrabbit, desert cottontail, chukar, prairie falcon, red-tailed hawk, rough-legged hawk, burrowing owl, mourning dove, horned lark, loggerhead shrike, common raven, gopher snake, Great Basin rattlesnake, and various lizards.

Surface Facilities: 1 Caterpillar D-9 bulldozer; 2 Caterpillar 966 front-end loaders; 1 jaw crusher; 1 crushing plant; 2 - 60 foot stacking conveyors; 1 20 yard belly dump trailer; 1 - 12 yard belly dump pup trailer; 1 Kenworth semi-truck; 1 Caterpillar diesel generator w/trailer; 1 - 1300 gallon diesel storage tank on skids.

Mining and Reclamation Plan Summary: Rancho Equipment Services plans to operate and mine limestone and sell the finished product to Intermountain Power Project (IPP) Generating Station near Delta, Utah. The operator will include practices designed to keep the area clean and safe, minimize

hazards to public safety, return the land to a useful condition, and insure reestablishment of at least 70% of the premining vegetative ground cover.

During Operations:

Mining will be conducted using typical open pit quarrying methods. Available topsoil resources will be salvaged and stockpiled for reclamation of the disturbed areas. Concurrent reclamation will be conducted during operations to the extent practical to minimize the amount of surface disturbance at any given time. Drilling and blasting will be scheduled as needed to supply limestone to the processing (crushing/screening) plant. Run-of-mine material will be stockpiled prior to onsite crushing. Following crushing, the limestone will be screened to separate the finished product from the waste/reject material. The finished product will be stockpiled onsite prior to truck transport to the place of sale. The operator will construct appropriate safety berms, fences or other barriers above highwalls and similar excavations. Any petroleum products stored on or above the ground will have a berm placed around storage area to contain potential spills. No waste oil will be disposed of on the project area. Excessive dust shall be controlled by water or dust suppressant. No burial or burning of trash will be allowed in the area of operations.

Following Operations

All mining and processing equipment will be removed from the mine area at the end of mine life or as soon as practical when no longer needed for the mine operation. The quarry area will be recontoured to approximate the original contour. No final slope shall exceed 3H:1V. Stockpiled topsoil and residual processed fines will be spread over the disturbed areas and seeded with a seed mixture adapted to the area and postmining landuse. Mine access roads that were not pre-existing, will be ripped, disked and seeded. All solid mining-related wastes, except for overburden and subeconomic ore, will be removed from the site and disposed of at an authorized landfill.

Surety:

Amount: $35,300.00
Form: Surety Bond - Insurance Company of North America #K03547073
Renewable Term: 1999 dollars

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M023022

UNITED STATES FIDELITY AND GUARANTY COMPANY
4001 303 540 7961

RECLAMATION ESTIMATE
Rancho Equipment Services — last revision 02/04/94
Topaz Valley Limestone Quarry — filename M23-22.WQ1
S/023/022 => M/023/022 — Juab County
Prepared by Utah State Division of Oil, Gas & Mining

Details of Final Reclamation

-Small mining operation converting to large mining operation
-All structures & equipment, trash & debris to be removed from the mine site
-All pads & new roads to be ripped to 6"depth, disked & seeded
-Quarry benches/highwalls blasted or regraded to 3h:1v
-ASSUME 2/3 quarry area has a highwall at reclamation
-Operator estimates maximum amount of salvageable topsoil as *4,000* *CY*
-Estimated salvageable topsoil spread 6" deep will cover approximately *5* *acres*
-Limestone fines to supplement topsoil for remainder of site; approximatel *10.8* *acres*
-Entire disturbed area fertilized, mulched, disked & seeded (drill or broadcast)
-All drillholes not mined will be plugged according to DOGM rules
-Disturbed area=quarry(7.2)+ore stockpile(1.6)+waste stockpile(1.6)+access(1.0)+topsoil stockpiles(0.8)+process area(0.5)+storage (1.1)+haul road(2.0)
-Topsoil stockpile areas to be disked & seeded
-Total disturbed acreage (from BLM EA) = *15.8* *acre*

Activity			Amount		$/unit	$
Regrade 2/3 quarry to 3:1			4.8	acre	578	2,774
Place fines on quarry(12" deep)	11,616	CY	7.2	acre	578	4,162
Place fines on other areas(6" deep)	2,904	CY	3.6	acre	289	1,040
Rip stockpile pads & roads			6.6	acre	485	3,201
Place salvaged topsoil(6" deep)	4,033	CY	5	acre	289	1,445
Fertilize (200 lb/acre) & mulch(2,000 lb/acre)			15.8	acre	200	3,160
Disk & seed			15.8	acre	230	3,634
Remove trash & debris			15.8	acre	100	1,580
Plug drill holes			1	sum	1,000	1,000
Remove highwall berms			800	LF	3	2,400
Remove culverts			5	each	100	500
Mobilization			5	equip	1,000	5,000
				Subtotal		29,896
		Add 10% contingency				2,990
				1994-$ Subtotal		32,886
		Add 5 yr escalation at 1.42%				2,402
				Total 1999-$		35,288
		Rounded Total in 1999-$				**$35,300**

Average $/acre = $2,234